

MC6/SOFTAPS — An Acquisition Reform Success Story

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In past years, the acquisition process was laborious, time-consuming and had a tendency to produce materiel solutions that varied widely from the original requirement. This fact is not lost on today's acquisition professionals whose honest motivation is to produce proper materiel solutions in a timely, cost-effective manner, for those who matter most — Soldiers fighting our Nation's wars.

Acquisition reform, including a host of subinitiatives such as Evolutionary Acquisition (EA) and Incremental Acquisition (IA) — just to name a few — are the mechanisms used to streamline the acquisition process in a rapidly changing DOD environment. This article highlights an acquisition reform success story — The Maneuverable Canopy 6 (MC6)/Special Operation Forces Tactical Advanced Parachute System (SOFTAPS).

MC6/SOFTAPS

MC6/SOFTAPS has taken advantage of acquisition reform concepts including rapid fielding, acquisition streamlining, IA and the idea that common sense should govern our materiel

developments for operational requirements. This system is one solution that meets two requirements:

- Static-line deployed parachutes that can withstand heavy operation loads at high altitudes. Currently, the MC1-1C main and Modified Improved Reserve Parachute System (MIRPS) cannot operate at high altitude with an adequate mission load without significant damage or failure.
- The Advanced Tactical Parachute System (ATPS), designed to replace the T-10 parachute in mass-tactical, static-line parachute operations. APTS is a Pre-Planned Product Improvement (P3I) of a steerable variant.



Live jump with the ATPS canopy.



The MC6 system rigged on the jumper ready for use. The MC6 system consists of the ATPS harness and pack tray, ATPS reserve personnel parachute and SF-10A main canopy. The outside appearance of the SOFTAPS and ATPS is the same with the exception of the blue nylon webbing used for the confluence wrap on the risers, which allows for easy recognition of systems at the time of issue from the parachute storage/issue facility. The ATPS will replace the MIRPS.

In December 1999, the U.S. Army Special Operations Command (USASOC) decided to replace the MC1-1C for high-altitude static-line operations. They found that the SF-10A canopy, actively used by the Forestry Service for smoke jump operations, could successfully sustain Special Forces (SF) soldiers with appropriate mission loads at high altitudes and consequently purchased the SF-10A canopy to meet that need. USASOC attached the SF-10A canopy to the T-10 harness and MIRPS and began to use this nonstandard parachute system for operational requirements. The advantage is that USASOC rapidly acquired a solution to its operational requirement without extensive acquisition research, development and testing lag time. This approach's shortcomings are that USASOC is now responsible for the purchase, care, upkeep and maintenance of a non-type classified, nonstandard parachute system. Basically, USASOC is footing the entire bill for a system that could be adopted Armywide.

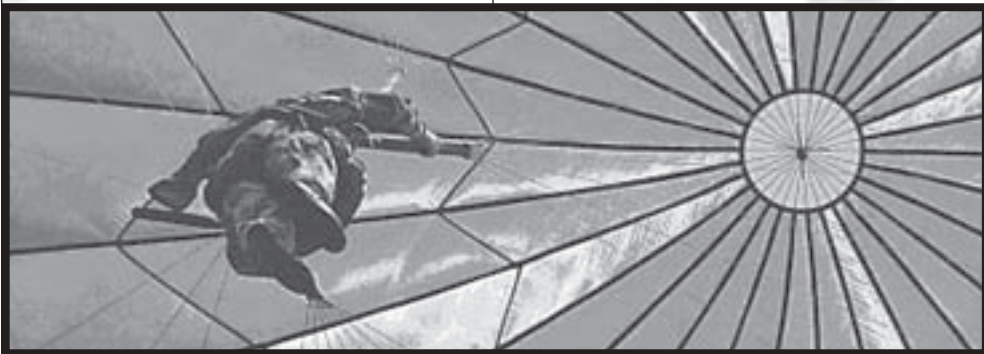
Multiple Requirements, One Solution

Concurrently, the U.S. Army Infantry Center and School identified a need for developing a parachute system that would significantly reduce jump injuries associated with current static-line systems like the T10C/D.

ATPS resulted from this requirement and entered into the traditional acquisition process. The end state was a vastly improved static-line, mass-tactical parachute system — especially in the parachute harness and reserve parachute areas. Additionally, within the requirements document, a P3I was established to produce a steerable variant that would replace the MC1-1C canopy.

Testing Simplified

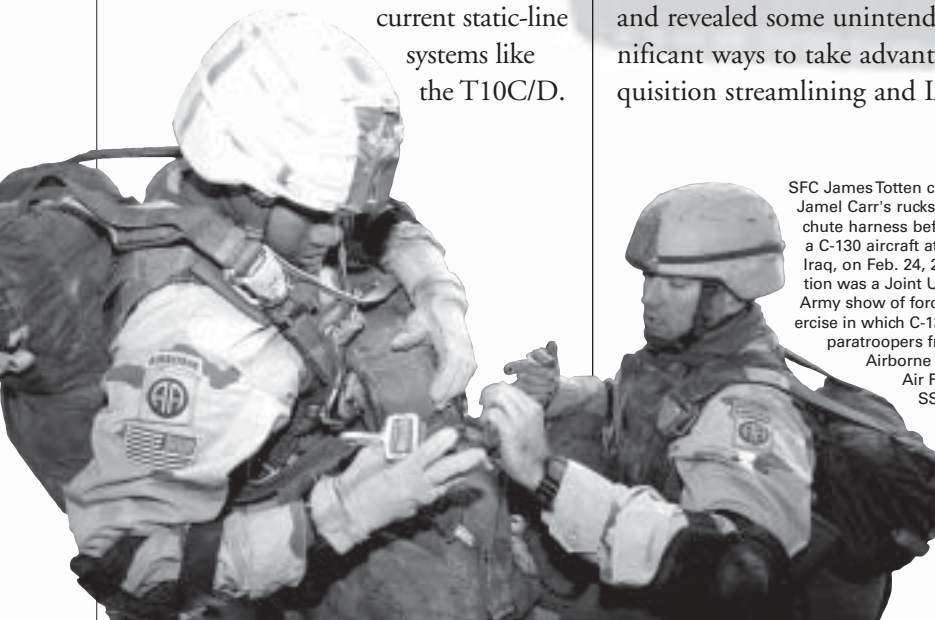
Because the SF-10A canopy was already extensively used by the Forestry Service and USASOC, all jumps using that canopy could be used as reliability data to support conclusions about canopy performance. This approach significantly reduced the scope of both the developmental test (DT) and operational test (OT) because of the wealth



USASOC quickly realized that ATPS had a vastly superior parachute harness and reserve chute system. In October 2002, USASOC came to the acquisition community with the idea to develop SOFTAPS, which simply took the SF-10A canopy — already in operational use — and with minor modifications to the risers, integrated it with the ATPS harness and reserve. This proposal ideally solved two requirements with one materiel development and revealed some unintended but significant ways to take advantage of acquisition streamlining and IA.

of readily available SF-10A canopy data. Additionally, DT and OT scope was reduced because the ATPS harness and reserve chute had undergone extensive testing and all the data applied to SOFTAPS. Product development time was reduced from 2 years for both OT and DT to 6 months for full SOFTAPS performance evaluation. As a result, from Milestone A in April 2003 to Milestone C projected in February 2005, SOFTAPS will be fielded to meet two operational needs in approximately 3 years, an awesome accomplishment.

USASOC funding already in place for SF-10A development can potentially be leveraged to complete MC6/SOFTAPS development, significantly reducing total program cost. Partnering the acquisition community with USASOC for funding will take the system through OT to type classification and Low-Rate Initial Production. Funds originally earmarked by USASOC for SF-10A costs are now applied to a larger program, eliminating the need for



SFC James Totten connects 1LT Jamel Carr's rucksack to his parachute harness before loading onto a C-130 aircraft at Balad Air Base, Iraq, on Feb. 24, 2004. The operation was a Joint U.S. Air Force and Army show of force capabilities exercise in which C-130s dropped 240 paratroopers from the 82nd Airborne Division. U.S. Air Force photo by SSGT Suzanne M. Jenkins.



Pararescuemen from the 301st Rescue Squadron perform a HALO jump over Tallil Air Base, Iraq, during *Operation Iraqi Freedom*. U.S. Air Force photo by SSGT Shane Cuomo, 1st Combat Camera.

USASOC to dedicate funds for its own unique system. USASOC realizes budgetary savings through the MC6/SOFTAPS program and the acquisition community realizes budgetary savings by leveraging nontraditional funding sources — a win-win situation for Soldiers, the Army and DOD.

Because the SF-10A canopy is currently fielded within USASOC, additional cost savings can be potentially realized by taking canopies in use and providing them as government-furnished equipment to the contractor to build MC6/SOFTAPS. With an estimated 18,000 total systems needed, the 3,000 canopies currently in the inventory will significantly impact the acquisition effort's total cost.

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MC6/SOFTAPS clearly serves as an acquisition reform success story whereby acquisition streamlining concepts led to the use of existing data on system subcomponents and applying that data to the testing. By evaluating complementary requirements, one ma-

terial solution was sought instead of two. The MC6/SOFTAPS also took advantage of IA concepts by deploying a full capability, incrementally fielded solution based on established requirements, to a broad range of units requiring these capabilities. Finally, this program system serves as an example of common sense acquisition by appropriately reducing DT and OT and creatively leveraging nontraditional funding sources to field a much needed capability quickly.

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